CLAIMS

ha 1

- 1. An invention specified by the following items (1)-(7) wherein:
- (1) the present invention is a method for displaying bitmap multi-color image data on a dot matrix-type display screen on which three primary color lamps are dispersedly arrayed;
- (2) a large number of pixel lamps are evenly arrayed in a regular pattern to constitute a display screen, the pixel lamps being three kinds of color lamps which are a first color lamp, a second color lamp and a third color lamp, and these three kinds of pixel lamps being evenly dispersed on the display screen;
- (3) image data to be displayed on the screen is multi-color data of a bitmap format, in which one pixel is expressed by a gathering of first color data, second color data and third color data;
- (4) a first color data plane on a bitmap image data plane is divided into a multitude of groups wherein each group is composed of a plurality of pixels arranged adjacently to each other; each group is made to correspond to each first color lamp on the display screen; an action of selecting, in a specified order, the first color data of a plurality of pixels that belong to one group is repeated at high speed; and the first color lamp corresponding to each group is activated to emit light according to the selected first color data:
- (5) a second color data plane on a bitmap image data plane is divided into a multitude of groups wherein each group is composed of a plurality of pixels arranged adjacently to each other; each group is made to correspond to each second color lamp on the display screen; an action of selecting, in a specified order, the second color data of a plurality of pixels that belong to

one group is repeated at high speed; and the second color lamp corresponding to each group is activated to emit light according to the selected second color data;

- (6) a third color data plane on a bitmap image data plane is divided into a multitude of groups wherein each group is composed of a plurality of pixels arranged adjacently to each other; each group is made to correspond to each third color lamp on the display screen; an action of selecting, in a specified order, the third color data of a plurality of pixels that belong to one group is repeated at high speed; and the third color lamp corresponding to each group is activated to emit light according to the selected third color data; and
- (7) a way the first color data plane is grouped, the second color data plane is grouped, and the third color data plane is grouped is such that the groups are mutually positionally-shifted on the bitmap image data plane while being partially overlapped, interrelating with a positional-shift in the arrays of the first color lamp, the second color lamp, and the third color lamp on the display screen.
- 2. The method according to claim 1 characterized in that a total of four pixels, adjacent each other in two rows and two columns on said bitmap image data plane, constitute one of the groups.
- 3. The method according to claim 1 characterized in that a total of nine pixels, adjacent each other in three rows and three columns on said bitmap image data plane, constitute one of the groups.
- 4. The method according to claim 1 characterized in that a

total of sixteen pixels, adjacent each other in four rows and four columns on said bitmap image data plane, constitute one of the groups.

- 5. The method according to claim 1 characterized in that said groups having the same color are partially overlapped on said bitmap image data plane.
- 6. The method according to claim 1 characterized in that said groups having the same color do not partially overlap on said bitmap image data plane.
- 7. The method according to claim 1 characterized in that regularity for orderly selecting a plurality of pixels that belong to one group is unified into one.
- 8. The method according to claim 1 characterized in that regularity for orderly selecting a plurality of pixels that belong to one group is different among adjacent groups.
- 9. A display apparatus that operates based on the display method according to any one of claims 1 to 8, comprising:

a dot matrix-type display screen section in which said first color lamps, said second color lamps and said third color lamps are dispersedly arrayed;

an activating circuit section for individually activating said first lamps, second lamps and third lamps to emit light;

an image data storing section for storing bitmap multi-color image data to be displayed; and

a data distribution control section for distributing and transferring the image data stored in the image data storing

section to said activating circuit section.

ADIC